Coahuila.

BY THOMAS L. KANE.

(Read before the American Philosophical Society, January 19, 1877.)

I. GEOGRAPHICAL.

I have recently returned from a three months' excursion into Northern Mexico. I went by rail to near San Antonio, Texas; from there took my own and government servants' wagons and mule teams. I was in no hurry, carried a party of intelligent friends with me as observers, and enjoyed advantages for seeing the country and its people which do not commonly fall to the lot of travelers.

I spent most of my time in Coahuila and Nuevo Leon. After visiting the country north-west of Piedras Negras, I looked up the different passes of the Sierra Madre which appeared inviting for railroad purposes from below Santa Rosa to La Rinconada. Finding Saltillo closely invested by Treviño, I crossed from the Saltillo road to Monterey, and thence returned to San Antonio via Mier and Laredo. I expect to have time soon to prepare a geographical paper and maps for the Transactions of the Society. I shall ask their patience this evening for the communication of a few facts not undeserving their notice.

I have drawn upon the blackboard, upon an enlarged scale, the leading features of Colton's latest Map of Mexico. I would ask your attention first to the contrast presented by the Rio Bravo to the other rivers of Southern Texas and Mexico. These are all greatly less conspicuous. They are seen to flow but short distances from their sources to the Gulf of Mexico. The Bravo or Grande del Norte, on the other hand, cuts a more important figure on the map, outdoing, apparently, the others put together. It is of much greater length and volume, and the reason is obvious.

By the contour lines, where you observe my effort to make hatchings with the yellow chalk, I indicate in a general way the course of the high land which is customarily spoken of as the East Branch of the Sierra Madre. From San Luis Potosi, here, (A) I have drawn the so-called Sierra as extending to the edge of the plain watered by the Rio Grande (B). It sinks as it proceeds north, until here, you see, only one mass of mountain north of Santa Rosa, I have represented it as entirely disappearing.

We have here our explanation of the greatness of the only Mexican great river, the Rio Grande. The great river, you remark, rises in the interior, more than half way across the continent, and it flows all this way as many as 1800 miles, to the Gulf; because no mountain obstacle is offered to its progress. It finds what might be regarded as a vast Pass where the "Sierra" has gone under. It is true (this is a parenthesis for our Secretary) that here (a) it is deflected, and, obedient to local geological orders, turns nearly at right angles, and works along at disadvantage for some distance, until it hits this seeming continuation of the valley of the Pecos (b). But it is

soon observed endeavoring to resume its direct forthright, and before long is found in line with itself, so to speak, adopting the course of the valley of the Salado (c d). The Salado, I will also halt to point out, runs parallel to a certain line of heights which has been recommended as the natural boundary line between the United States and the North-east Provinces of Mexico (C D).

Reflecting on the significance of such a fact as the Rio Grande, you perceive how natural a thing it was for me to ask myself: Why should not a new route for a transcontinental rail way be discovered here—not far from the path of the great water way—through upper Mexico? This led me to examine, as I have said, the different passes or depressions of the misnamed Sierra, furnishing inclines leading up to the elevation of the Great Table. I looked for them into or through the Sierra, it is true, but comparatively near the river, where its elevation is diminished, and what is left of it is broken up. I am rewarded by having found two, and probably three, Passes, preferable to those heretofore recommended to the Engineer.

I am positive now that I can indicate the true line for the railroad, south of the Union Pacific, from the United States to the Pacific Ocean; and the best of it is that the short cut, B F, is the one which provides the most moderate gradients. From San Antonio, as your starting point, make your shortest cut for Mazatlan, and you will not be very far from either of these two lines.

The routes described in this paper both pass through the rich agricultural Laguna country, and through the richer Durango mining one, and are both singularly cheap of construction. Neither of them is deflected noticeably from the straight line, except as the Pacific is approached, where, to avoid engineering obstacles (less expensive ones, though, than those which the California Central R. R. has overcome), I recommend turning down into the State of Jalisco, through the northern part of the District of Tepic. There the Sierra Nevada, E F, coming from the north west, lowers as the East Branch of the Sierra Madre does in Northern Coahuila. To obtain a gentle slope without paying for it, I do not attack, but flank the Snowy Range.

Next in interest to these inter-oceanic railroad data (perhaps, too, after certain military questions unavoidably associated with the same) I should, perhaps, advert to the results of a visit to the country below the upper bend of the Rio Bravo, marked on the maps as Terreno Desconocido and Territorio Non Explorado. I thought it would be a rare field for original exploration, but it proved to have been well known to the Spaniards, who have left roads, military earthworks, mineral shafts, and other evidences of their presence there. The names of old Spanish settlements might be sprinkled over all this unoccupied space (x to y, and v to z). The correction of such an error as this should appear at least in our children's school atlases. I could occupy the evening in enumerating others, but will close with citing two hardly less striking. The Bolson de Mapimi, here, which covers so large a space on the maps, should properly be restricted to a

more limited area, north of the town of Mapimi. Mapimi, an old Spanish mining town, gives its name to a mountain near it, shaped somewhat like a big purse (Hispanicè Bolson). It appears to have been an after thought with geographers to lay down a figure of this shape, large enough to include a great reach of desert* plain. A similar correction should be made for the Barrial de la Paila, which is quite a narrow stretch of sterile plain lying on the west side of the Sierra de la Paila.

II. ETHNOLOGICAL.

After a review of Humboldt's work in New Spain, closing with a eulogium on the great Explorer's thoroughness, General Kane proceeded:

But Alexander von Humboldt did not visit the Northern Provinces of Mexico. And I may say another thing without irreverence; he was not an ethnologist. In Spanish America, too, the persons who gave him most information in Natural History were priests or members of religious orders in the Roman Catholic Church. The minds of sincere persons in that communion have ever been fettered by the dogma that "God hath made of one blood all the nations of the earth," and they have seldom pursued ethnological research with zeal, never with impartiality.

I am sure that I do not overrate the value of Northern Mexico as a field for ethnological study. I can say emphatically of it that in this respect it is terreno desconocido; territoric non explorado.

It will be particularly interesting to us to seek the solution there of certain Historical Problems which have baffled our investigations.

In the Old World we have not been able to divest ourselves of the bias arising from our being in some manner or other parties to the discussion of historical questions. Each specimen of us belongs to some particular race or mixture of races, and, whether he has had a grandfather or not to take a pride in, if his self-consciousness but carries him back a single generation, he unites in feeling with those whom he thinks most like himself in mistaking what they accept as History for Science. Most of us in fact have a direct political or religious interest or feeling involved in our preference for deciding questions by the bulletin or historical pamphlet, rather than by the scalpel and craniological caliper. Prejudice should blind us less in Mexico. If we love our Dutch or Scotch, and hate our ancestral Spanish enemies, we cannot help unduly praising our Orange-Nassaus, and hating our Alvas; while we do not care enough to cheat much regarding the respective merits of the followers of Coanocotzint or Ixtlilxochitlt. An imputation on the standing of the Trinity, or the Virgin of the Immaculate Conception, may wound our feelings; we care nothing for theories ascribing greater or less exaltation to the gods Texcatlipoco, § or Cu-at-li-cu-e.

In Northern Mexico, races have lived of the greatest variety of osteological structure. They have left, and they are now depositing in profusion,

^{*} Desierto, Desert, not necess urily meaning uninhabitable desert.

⁺Texcocan enemy of Cortes.

[‡]Texcocan friend of Cortès.

[¿]Of Heaven

^{||} Of Flowers.

most interesting crania, simple and composite. Nowhere probably in the world are so great a number of healthy, full-grown youths, of known habitat and pedigree, meeting with violent deaths, and leaving their bones at the command of the collector.

Over Northern Mexico, and through it, in times bygone, have passed successive migrations of races, as remarkable as those which have occurred in our own historical period in Asia and in Europe.

And, alas, of the conquest of the weak by the strong, of that which you and I, Mr. President, if alone, must maintain to be the Survival of the Unfittest, of the conquest of peaceful, industrious and civilized races by warlike ones, Mexico affords us at least two distinct and notable examples. Not less than two great invasions have proceeded directly from Northern Mexico, or passed through it. All the American conquerors of Central Mexico that we know of came from the North. We can study them in Northern Mexico as they existed before they removed South. It is an important point I make, that our researches in Mexico may be conducted in a strictly scientific spirit, free from the disturbing influences of partisan literature.—Of what nation is not the literature without force, if its tone is not (regarded in a philosophical sense)—provincial and partisan?

Again, the singularly favorable political anarchy now prevailing in Northern Mexico should be of the greatest service to the student. Seventy years ago the Spaniards governed New Spain. Not only their military sway (though, as I have intimated, it surprises the traveler every day how far out into the North they carried their military roads, their presidios, soldiers and cannon), but the dominion also of their laws prevailed, and their social customs, with their language and religion. Since the removal of the forces which maintained law and order, the whole of this régime has ended, or is coming to an end. The mental and moral characteristics of each native stock are seen to be re-asserting themselves. You can detect, with corresponding physiological varieties of structure, what manners the several species, sub-species and varieties were originally prone to, what laws naturally suited them, what religion. In truth, straight out before your face, and inconveniently to the purpose if you are in their way, they disclose what other species of men they are predestined to hate, and refuse most ferociously to live with on terms of amity.

To a certain extent an invading movement from the North upon more Southern Mexico is going on at this moment. I had a peculiarly favorable opportunity for witnessing an instance of its operation on a small scale.

I obtained an invitation at Piedras Negras to accompany the column of Government troops which moved upon Monclova and San Buenaventura in November last, and I made the most of my good fortune.

I had Don Pedro Valdès, the Military Governor of the district of the Rio Grande, and Colonel Ferdinand Montragon, his second in command, with me all the way. As far as Monclova my mess, my tent, my ambulance were theirs; one or other of them hardly left my sight. They knew personally a large number of their soldiers; whenever any one attracted my

attention as a subject of study, and they could not answer my questions regarding his name, birthplace and genealogy, they ordered him up to speak for himself. They became honestly interested in some of my ethnological guesses, which they esteemed shrewd, and, I honestly believe, went beyond politeness in giving extension to my inquiries. I think I pretty faithfully studied over 300 equestrian men; nearly all who were not of native Indian blood being Mestizo. Should I not at some future day recur to this subject, let me dispose of it by saying that, with traces of nearly every race whose abode has been the Iberian Peninsula, Basque, Jew, Zingaro even, the predominant Spanish element apparently was Andalusian. I could not at all guess how many kinds of native Mexican entered into the medley. My companions could distinguish many more than I could. A captain from near Bustamente, where there is an interesting ancient colony of them, could point out every Tlascalan in the crowd. But this I did see plainly myself, a large majority of the fighting riders were of the stamp of our own South-western warlike Indians. I am very familiar with the physiognomical characteristics of the Arrapahoe, Kickapoo (Qu. chica puta?), Ute and Sonora Apache. I lived some time among the Shoshones, and may be trusted to detect the Comanche wherever it occurs. I found the Comanche through Valdès' command in force.

The small-sized photographs which I place on the table were selected by me, chiefly from an army officer's collection, as being striking likenesses of men termed Mexicans, and regularly enrolled as members of Valdès' National Guard. If they were dressed up in the pictures as Christians, I have no doubt the subjects and their friends would have great pleasure in recognizing them. On the face of each photograph you will find the Indian name and tribe, on the back the Mexican.

The other photographs support views advanced by me in former, now nearly forgotten, communications.* The notes endorsed upon them will I think repay perusal.

a. Affords an interesting example of Atavism: the back leap, as the Spanish term it. The mother, a Mexican woman whose family style themselves Spanish, acknowledging only one sixteenth of Indian blood, is convicted of the Sambo or Chino by its reappearance in her daughter, an engaging and estimable young lady who is quite a dark mulatto. Fig 1. Her sisters, 2, 4, 5, 6 exhaust the shades of the segar box.

b. and c. Exemplify strikingly the persistence of the type. The German girls in b. were captives from their youth, very hardly used up to the age of puberty, when they were rescued. c. was more tenderly nurtured, being a head chief's favorite daughter. They are tame; she remains wild —fera naturæ.

*On Rank and Merit depending on lineage among certain (North American) Indian Tribes. 1847.

Lavater + Daguerre. 1848. Replies to Nott and Gliddon. 1850-1852.

Differences in the Results of Emancipation in the British West Indies corresponding to differences of Raee observed there. 1853.

Idiosyncrasies of the Lucumis Gangas and other Bozales in Cuba. 1857. The Application of Ethno-Physiognomy made by Mr. H. H. Slatter, 1856. PROC. AMER. PHILOS. SOC. XVI. 99. 38

d. A family of German descent, exposed as partly Chino Mexican. The bony framework of the subjects not having been modified; the physiognomy, due to the integuments, is common to all the children, but the elder sister's face (2) is darkened by a shade of pigment in the mucous coat. In 1. and 4. it is said to be detectable in the *luna*.

The working of our little Invasion was about this: Valdes' army was made up, certainly more than half of it, of men of Northern Indian blood. They were moving south. Some of them might return, perhaps not many. When the company of Saragossa was marched off from that place, I saw a crowd of their women assembled to weep and wail over them in half Indian style, as if it were about to prove their last farewell. Other recruits who had left the pueblo under similar auspices had not returned. Their fate had been to die in battle, or of disease, or of the effects of wounds and exposure-or to embrace permanently the military eareer, in which ease the élite of them found employment as regulars in the City of Mexico, or elsewhere in the provinces not far from the National Capital. The average man thus, after directly killing or contributing by impoverishment to starve a given number of the more industrious and peaceable members of races of the South, would become a southern resident, and leave descendants of his own, South, who would be half Northern and half Southern; that is, it might be, half warlike and lazy, half industrious and inoffensive.

Esteeming it a compliment to have been invited to express my opinions upon the political condition of Mexico at this interesting juncture, I will not consider it beneath the dignity of Science to notice the subject from an Ethnological point of view.

The North, as well as the rest of Mexico, presents a clearly marked case of Arrested National Development. The natural tendency of the different populations of Mexico to unite in one having been interfered with three centuries and a half ago by an outside pressure, and this pressure having been withdrawn, its effect upon the national life is now seen to have been unfavorable. Not only the political health, but, to persevere in the use of my figure, the existence itself of Mexico as a nation is menaced. The thoughtful observer is left in doubt whether, for the welfare of the people of Mexico, a synthetic or a further analytic treatment of their confederacy is most demanded. The former may be premature, the latter, now going on so rapidly, risks being carried too far. Many honest thinkers are of opinion that it would be beneficent to restore the foreign pressure, or an equivalent for it. In my opinion it would be but a reproduction of the original evil.

With your indulgence I will enlarge upon this theme, for brevity and to avoid confusion soliciting you to restrict the application of my remarks of a general nature to the Central Table Lands, of which we may popularly speak with least inaccuracy as Mexico.

At the epoch when the Wars of the Roses, Welsh wars and Scotch wars were preparing for Great Britain a United England; when the various elements already united as Gascons, Bretons, Picards, Normans were con-

tending which should form the future France; when, — less effectually as it has proved, because the ethnological differences involved were greater,— the different populations of Spain and Aragon, Murcia and Granada were fighting out whether they should absorb or be absorbed in the kingdoms of Castile and Leon, the different native tribes of Mexico were at the same work in their own way.

They were very numerous. Geiger says, "There were at the time of the conquest and there are now, more than thirty different races, speaking as many different languages and marked by distinctive peculiarities." (p. 317.)

Our standard authority Humboldt's remarks are, "The great variety of languages still spoken in the Kingdom of Mexico proves a great variety of races and origin. The number of these languages exceeds twenty, of which fourteen have grammars and dictionaries tolerably complete. * * * It appears that the most part of these languages, far from being dialects of the same (as some authors have falsely advanced), are at least as different from one another as the Greek and the German, or the French and the Polish."

Humboldt mentions the Mexican, Otomite, Tarasco, Zapoteco, Misteco, Maya, Totonac, Popolouc, Matlazing, Huastec, Mixed, Caquiquel, Taraumar, Tepehuan and Cora. To these, the Mazahua, Huave, Serrano, — and, well, say a dozen others may safely be added. How many of these are derived from the primitive Nahuatl, neither this, nor in fact any other abstruse philological question, am I qualified to discuss. Enough here that my own observations lead me to place the number of separate tribal societies very high. But at the date of the Spanish conquest they were in a fair way of coalescing. With various ins and outs, and ups and downs, there can be no doubt that a process of consolidation was going on in Mexico through the thirteenth, fourteenth and fifteenth centuries, corresponding to that observable in Europe during the same period.

The Toltecans evidently had absorbed many tribes before they were succeeded by the Chichimecas, whose own absorptions constituted the monarchy of Tezcuco. Tacuba or Tlacopan had a similar history. So had the Aztec Kingdom or Empire, with whose history we are perhaps most familiar, the one ruled by the Montezumas. The original Aztecan divisions of Tlaltelolcos and Tenuchcas are mentioned to the traveler at this day, when his guide points out the ground they severally occupied upon the site of the present city of Mexico. These only united to form the Mexican monarchy in 1438. But by the beginning of the sixteenth century, Tlacopan, Tezcoco and Aztecan Mexico were practically united in one Confederacy. I cannot see how there is any room for question that the League had become a single nation, powerful enough to absorb all minor ones—outside of the Tarascos, and those Guastecos, who in Tamaulipas, under Cortina, are giving Texas so much trouble at this time. There survived, it is true, a few small independent nationalities. There was the priestly government of Cholula, and the moderately warlike kingdom of Aculhuacan, and the

Republic of Huexotzingo, and the stronger Republic of Tlascala, which was fighting for its independence against overpowering odds, when Cortez arrived barely in time to save it. Mr. Prescott has no authority for saying that the more widely the Aztec Empire was extended, the weaker it became. On the contrary, Mexico, under Montezuma II was as much a homogeneous nation between the Atlantic and Pacific for ten degrees of latitude, as Spain was then from the Mediterranean to the Pyrenees; more than England was from the Channel to the Highlands of Scotland.

I like to use dates when I can. In Europe we have 1519 as the year of the accession of Charles V in Germany. Three years before, the Fleming had become King of Spain. Four years before, Francis the First had become King of France. Ten years before, Henry the Eighth had ascended the throne of England. But in the spring of 1519 Hernando Cortez wooed his Malinche Marina in Tabasco and sailed with her to Vera Cruz. He entered the City of Mexico a conqueror, August 13, 1521.

With the effect of the European element introduced by Cortez you are familiar. The complete disintegration of all indigenous national combinations went with the extension over the Grand Mesa of the Spanish arms, laws, religious and social usages. We may safely speak of the Spanish rule as having continued absolute for more than two hundred years.

When, towards the close of the last century, the ethnological differences prevailing in Spain asserted themselves anarchically there, surprise is expressed at the slowness which her colonists evinced in throwing off the yoke. It was an uphill business in Mexico, and was managed there in the old time Spanish way—by men almost exclusively of Spanish blood. Their movement was not apprehended by themselves to be anarchical. They, at least thought that their cause was that of order, union and religion.

Hidalgo was a Spanish curate. Take his date as 1810 He was caught (where I came near coming to grief myself) at Bajan, in Coahuila, March the 21st, 1811, and shot the following 1st of August.

Matamoros, the curate of Janteteleo, was shot August the 3d, 1814, Curate Morelos, December 21st, 1815, and Mina, November 11, 1817. Yturbide proclaimed the Plan of Iguala February 14, 1821, and concluded the Tratados de Cordoba with Don Juan O'Donoju, September 27, 1821. Everyone of these champions of independence except Morelos, was clear Spanish, and the cry of the triumphant liberating army of the Three Guarantees I believe faithfully expressed the feeling of what was then still subsisting a Mexican Nation. The motto was borne on the tri-colored flag which the nation united in adopting. It was "Religion, Union and Independence."

Naturally we Americans have a prejudice against Yturbide because he had himself crowned Emperor in a cathedral, and perhaps because his family lived among us in their adversity, making themselves too familiar with us, particularly here in Philadelphia. But there was prob-

ably a good deal in Don Agustin before his head was turned. He had some excellent and faithful men, too; and under him, or some of these, his nation, I think, might have hammered its music out. In my judgment, the Mexicans have always acted foolishly in imitating ourselves and the French. Their establishment of a Federal Government, October 4, 1824, with a constitution affecting to be more or less a copy of our own inconsistent binate one, was a mistake. But in the end, under it, or something like it, they could possibly have made things work. But they have never had a fair chance. Their country was too rich to be let alone.

Before they could set their first government in running order, foreign invasion, and threats of foreign invasion, compelled them to pay exclusive attention to their foreign instead of their domestic affairs. It threw into the background men of learning and men of moral worth, and brought forward the more brutal sort—the hombres de armas—men of the horse and of the sword—the curses of Mexico. These men were required to defend the people from those who should have given them common interests, but only gave them a common enemy.

Indulge me, if you please, in a little more chronology.

The gravest of Mexican errors, the expulsion of the Gachupinas, was brought on directly by the threat of Spanish invasion.

Not a year after the last Spanish troops embarked from Vera Cruz, November 18, 1825, the Padre Arenas conspiracy was under weigh.

Barradas' expedition actually landed in 1829.

Our colonization of Texas, under Stephen Austin, had begun early in 1828. Edwards' effort at revolution came off there, if I remember, the year before.

In 1832 our Texaus united with Santa Anna in pronouncing against the government of Bustamante, and defeated the Mexican troops with loss. In 1833 they separated from Coahuila.

In 1835 and 1836 they—I had better say we—fought the Mexicans in Texas. We—our Government—formally acknowledged Texan independence in 1837.

1840 is the date of Ben McCulloch's Texan Ranger fight.

1841, 1842, 1843 are the dates of our expeditions against Santa Fe and Mier.

In 1844 President Tyler concluded his Treaty of Annexation with the Texan Commissioners. We admitted Texas into the Union December 27, 1845; fought our battles south of the Rio Grande in 1846–1847; patched up our so-called peace in 1848.

We were hardly done with the Mexicans then before the French were at them a second time with their Reclamacion de los Pasteles—"their Pie Claims," as the Mexicans call them. I omitted to mention that in 1837, at the time when we acknowledged the independence of Texas, France was bullying Mexico about these Pasteles—claiming damages for pastry-cook's trays and the like, to the tune of \$600,000. In 1838 she had shown us, with a fleet of eleven vessels, how easy it was to humble Mexican national

pride, by taking the old fortress of San Juan d'Ulloa. How France went on after this, giving the Mexicans no peace, is the history so familiar to us of the famous Intervention.

The Mexicans had France, Spain and England together upon their backs by 1861. Bazaine did not evacuate Mexico till 1867.

Certain political wounds are too green for me to say what I think of the course adopted by the United States after this.

I am unfortunate enough to entertain the conviction that in morals we are responsible for a great deal of the wrong which has been done. Breaking off abruptly, I should beg you to pardon my apparently meaningless digression. I am not confident that I have made out my case, but I felt bound to put in a plea for my Mexican friends who appear to you inexcusably engaged in the business of national suicide.

So very few of our good men have ever met them, the Mexican good men and gentlemen, when the Erinnides were not pursning them! I stand almost alone in declaring that I know them as uniformly courteous, and generous, and brave—worthy to be the sons of mothers who, rich and poor, gentle and simple, afford the world some of its fairest examples of devoted tenderness and saintly piety.—Admit that they seem to be given over to the Furies. If they deserve our censure, they are entitled to our pity.

This said, I will return to what I think indisputably true. The history of Mexico for the last half century is that of the resolution of a population more and more into its constituent elements. The different races have asserted themselves, or have been used by the various politicians to enforce their pretensions. Some of these fellows have been strongly backed, perhaps by the remnant of a former ancient confederacy or union of several tribes having similar ethnological characteristics; others have appealed only to the interests of single tribes or half tribes, as insignificant as the following of the ten-vote repeater who traffics for office on our State House Row. The same phenomenon, the thought occurs to one, is seen in every country, but it looks uglier where it is associated with the direct employment of physical force. Running up from Acupulco, in 1857, I saw "the Southern Tiger" Alvarez. A straight-limbed old Indian-not a trace of Spanish was discernible in him or any of the squaws decked in French dresses who constituted his dusky harem. King of Guerrero his flatterers called him. Before the Conquest he would probably have been King of Michoacan. He might then have fought a Moctezuma. In our times he fought and overcame a Santa Anna.

Alvarez would have been at either epoch neither more nor less than Head Chief of Tarascos.

I will take a second example from the other extremity of the Republic. Tamaulipas on the Gulf of Mexico is another renowned nursery and eradle of Revolutions. It is a unit in politics. If a Mejia has it, he is as sure of his following as a Bayard in a southern county of Delaware. Only, its warriors do not turn out to vote. They follow him with horses and arms, and expect him to supply them with ammunition. Tamaulipas is popu-

larly spoken of as a State. It is regularly divided into three districts—del Norte, del Centre, del Sur—and sends its nominal representatives often to the Federal Capital. But it is nothing more nor less than the old country of the Guastecos, which was imperfectly subdued, even by the Spaniards in their day. And Tamaulipas too has its Head Chief now, a Major General, and Lieutenant General, and Excellency, Governor Supreme, and so forth—Cortina. And Cortina is all and singular, gold lace and epaulettes included, just about the blood thirstiest savage existing on the Continent.

What have we to study in Mexico ethnologically, besides the descendants of the primitive inhabitants? The Gachupinas? They are better studied in the land of their derivation. What else then for the study of the ethnologist in Mexico? Alas! The Mixtures. Nowhere is there presented a greater variety of these than in Mexico. Every proportion of every variety of Spaniard; with every proportion of Indian, Mediterranean man, Moor and Negro. Nothing can be more distasteful to the inquirer who desires a simple study, than the variety of mental and moral characteristics which we find in the Mestizoes is associated with their diversity of physical constitution.

Among the mixed breeds the difference in the proportion of the characteristics derived from the different ancestors introduces anarchy into social circles, into the family itself. The appetites, the passions, the powers, the higher aspirations of one child are impatient of, are directly hostile to those which contribute in a different proportion to form the character of another. Here then, among the people of mixed breed is the Debatable Ground, the field for the intrigues and machinations of the designing politician. The typical politician of Mexico is himself the result of a mixture. He is restless, because the different elements in him vary his desires and aspirations. They are not the same at different periods of his life, are modified by the company he is keeping. He is inconsistent, when the medium in which he lives undergoes change. He lies, perhaps for the same reason that he is inconsistent. He is deliberately perfidious even, and then is the last man on earth to know how little he is to blame for being so. Who is to blame for his ferocity combined with gentleness, for his mingled generosity and ravin, his instincts of high honor united with deceit; yes, with revolting treachery. The answer is, the man who is responsible for his being the mixed man that he is; the Spaniard who was his ancestor is the culprit, who basely mated with the Indian woman from whom the Indian part of him is derived.

We have a distinguished Professor of Princeton proposed for membership to-night, whose ripe scholarship the Society will doubtless honor with the tribute of an election. There are members of the Society on the floor before me who believe (and they are entitled to their belief, though it is not my own) that there is an *Ultimate Philosophy* which will harmonize all knowledge with Religion. Indeed, I know that there is one, my valued friend, who goes so far as to entertain the conviction that Theology is entitled to be

ranked among the Exact Sciences. To such I would turn, and, adopting the terminology of that imposing study, would indicate the value of Northern Coahuila as a Hell where we can study faithfully what Sin means. We need be at no loss there for examples, for proofs that the sins of the fathers are visited upon the children—and that, beyond the third and fourth generations.

The splendid conqueror still dazzles our eyes as he flashes across the page of history. We realize how chiquard it seemed to many a young Spanish noble of pure blood to follow in the footsteps of Hernando Cortez, to carry about or be carried about by, to lead or be led astray by his Malinche-but we have come down to the end of that nice business. The dreadful end! The savage Indian would not now be re-asserting his savage characteristics, but for the aid lent him by the Devil working through the illegitimate descendant of the Spaniard. There is no mistaking it; it is the Red Savage—the old Adam—terra rubra there, out upon the warpath. The Spanish military rule first overthrown, he has subverted the civil order which it sustained. For the law which the Spanish introduced (a stately system not unworthy of its Latin origin) he prefers, perhaps on the way to re-introduce ancient barbarous and local usages, the momentary will of the last chief under whom he has fought as a brave (bravo) in battle. The language, for the birthright to use which all Christendom envies the Spaniard, he is expelling from the country by debasing it more and more with his native Indian below standard. Finally, he is destroying the last bond which holds the peoples south of the United States together, their religion. Under Juarez, who faithfully merited his surname of El Indio, and his successor, Lerdo, the persecution of the Catholic Church has been successful in eradicating true religious feeling to an extent which, before my last visit, I could hardly have believed possible. Among the ruling politicians in the north, I did not meet one man who, in conversation with me, did not proclaim himself superior to "Superstition." The authorized school books, in the miserable attempts at public schools, taught Huitzilopochtli (alias Mexitli), Melantiuctli, Tezcatzoacatl, and the glories of Netzahual-coyotl⁴ and Cuahtemoc.⁵

These be thy gods, O Israel!

There were old Spanish churches left, many of them not yet fallen to ruin, into which occasionally glided a few women muffled in black shawls, with their little children. Then a proscribed man might skulk in, perhaps, through a little door under the altar, and don for the mass priestly vestments which he was not allowed by law to wear outside the church. But the building you would find did not belong to him, but to the State. He could not, nor could any religious corporation, own property as religious societies do in the United States. If the Spanish bells in the tower were not melted down, he had no right to ring them; not to announce fair daylight to the sick-bed, not to bid an Angelus tell the laborer that it was

Gods—1. Of War. 2. Of Hell. 3. Pulque. 4. Tezcocan Klng, d. 1436. 5. Enemy of Cortez, d. 1525.

noon, not to sound a Vesper to "regret the dying day." But in the very midst of his murmured masses, in the crisis of the elevation of the Host itself, he might be interrupted by ruffians rushing in to ring a peal of their own, upon the receipt of news of some murderous victory, real or pretended.

In two skirmishes, so-called "battles," which I was regaled with, the church was the centre of the fight. In Monclova the women ran out of the church when the firing began, as they might with us after service, from a gathering thunderstorm. This was Sunday, November 12th ult., about noon. N. B.—Remington (American) bullets whistled about their ears.

Hoc ab initio persuasum civibus dominos esse omnium rerum ac moderatores Deos; eaque quæ gerantur, eorum geri vi, ditione, ac numine.

* * * His enim rebus imbutæ mentes haud sane abhorrebunt ab utili et verâ sententiâ. It was an exotic—the Roman Religion—an imported article; but it was the last bond left to tie a good many unhappy souls together. It is nearly worn through. The last strands are parting. In short, the way things are going on, ten years ought to be a generous allowance for Mexico to rehabilitate the worship of her indigenous Gods of Hell, and Pulque, and War, and the sanction of public human sacrifice.

A continuation of Researches among the Batrachia of the Coal Measures of Ohio.

BY E. D. COPE.

(Read before the American Philosophical Society, February 3, 1877.)

The material described in the following pages was obtained from the coal strata at Linton, Ohio, during the Summer of 1876, by Prof. J. S. Newberry, Director of the Geological Survey of Ohio.

ICHTHYCANTHUS OHIENSIS. Cope. Gen. et sp. nov.

Char. Gen. These are derived from the posterior dorsal and caudal vertebræ, with adjacent parts. Posterior limbs well developed, with distinct tibia and fibula, osseous tarsus, and probably five digits. Ribs elongate, simple, curved. Abdominal armature consisting of bristle-like rods in anteriorly directed chevrons. Dorsal vertebræ not elongate, with simple neural spines. Tail large, its vertebræ ossified, and furnished with slender chevron bones which terminate in a hæmal spine. Neural spines slender and directed backwards; the caudal series somewhat resembling that of a fish. All the centra amplicælian.

This genus differs from all those with enlarged and sculptured neural spines, and from those with abdominal scuta. It is equally distinct from those without ribs, abdominal rods, or limbs. It is possible that some of the species referred to *Tuditanus*, in which these parts are unknown, may belong to it, or that it may be established on a small species of *Leptophrac*-